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## **Processability Theory: Current issues in theory and application**

**Camilla Bettoni and Bruno Di Biase, eds**

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## Chapter 7

### Acquiring constituent questions in Italian as a second language

*Camilla Bettoni and Giorgia Ginelli*

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#### 1. Introduction

Constituent questions are sentences marked both pragmatically and linguistically. Pragmatically, speakers use them to request new information. Thus constituent questions always have an element ‘in focus’ (Lambrecht 1994; Mycock 2007). This focal element is the interrogative phrase. Focality is not a prerogative of questions, but in this type of sentences the focus is obligatory, and goes through specific linguistic constraints. Hence, constituent questions are also linguistically marked. Such constraints vary cross-linguistically, and can be structurally complex to codify. Furthermore, in comparison with declarative sentences, constituent questions occur less frequently in spontaneous conversation. For all these reasons, it is not surprising that they are difficult to acquire by L2 learners.

This paper investigates the acquisition of constituent questions in Italian L2. In § 2 we outline their main feature cross-linguistically, namely, the focusing of the interrogative phrase. In § 3 we describe how this focusing is realized in Italian by using the LFG framework. In § 4 discusses PT’s hypothesis for a developmental hierarchy for the acquisition of Italian constituent questions. After a presentation of the study in § 5, we test the hypothesis on empirical data in § 6. In § 7 we summarize the findings.

#### 2. Constituent questions

Constituent questions require the presence of one (or more) QW that replaces the constituent (or constituents) of the corresponding declarative sentences. As Tallerman (2005: 218) says “we can tell that the [interrogative phrase] replaces the phrase it stands for by the fact that we can’t put another phrase of the same type” in the same sentence. For example, a sentence like (1) is ungrammatical, because a verb can govern only one grammatical function per type, with the exception of the adjunct function, which is the only one that can appear in the same sentence more than once (Darymple 2001: 11). Here the verb *go* governs the oblique locative function. The presence of two locatives in

the same sentence (*where* and *to the station*) is impossible, and therefore the sentence ungrammatical.

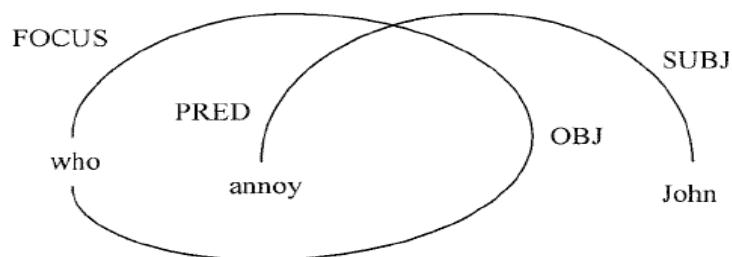
- (1) \*where does John go to the station?

On the other hand, (2) is grammatical because each interrogative phrase (*who* and *where*) replaces a different grammatical function governed by the verb (subject and locative respectively):

- (2) who does John meet where?  
John meets Sue at the station.

Constituent questions are used to request some piece of new information. As question words (QWs from now on) always represent this new information, they are the focal element of the sentence. Focality is not a prerogative of interrogatives, but in interrogatives the focus is obligatory (Choi 1999), and goes through specific constraints. These vary cross-linguistically: all languages can satisfy the communicative need of requesting information, but each language does it using different linguistic strategies. A derivational approach describes these strategies in terms of syntactic movement, and assumes a typological division between languages that formulate constituent questions by placing interrogative phrases in initial position (simple- or multiple-fronting languages), and those that leave them in the same position of their non-interrogative equivalents (in-situ languages). In the LFG approach, constituent questions are described as a particular kind of ‘filler-gap structures’ (Falk 2001; Kroeger 2004). These structures imply the existence of a missing element at the ‘gap’ position, and of a ‘filler’ bearing two functions: one is the discourse function Focus, associated with the interrogative phrase; the other is the grammatical function, associated with the gap. The functional structure of ‘Who did John annoy?’ is represented in (3). Here we can see the double status of the filler (*who*), that bears both the discourse function Focus, associated with the interrogative phrase, and the grammatical function, in this case the object function, associated with the gap.

(3) Functional structure of ‘who did John annoy?’ (after Kroeger 2004: 170)



In f-structure, abstract grammatical functions and features try to capture universal syntactic principles that vary cross-linguistically at other levels of representation. Hence, the f-structure of constituent questions is independent from language specific connotations like, for instance, word order: “since pragmatic function of constituent questions is much the same in all languages, the functional structure of constituent questions in various languages is likely to be quite similar even when phrase structure configuration is very different” (Kroeger 2004: 171; cf. also Bresnan 2001: 45).

Mycock (2007) shows that both these approaches – the derivational approach and the functional one – fail to explain crucial aspects in the formulation of constituent questions such as prosody. That is, they can capture only those principles that underlie the formation of constituent questions in languages like English that realize the focusing of QWs syntactically. However, in in-situ languages like Japanese, the focusing of the interrogative phrase is realized only prosodically. In these languages, the QW appears in the same position it occupies in the equivalent declarative sentence. Because it is not grammaticalized, the discourse function Focus is not indicated at f-structure. Using a LFG perspective Mycock maintains that constituent questions can be reduced neither to their word order nor to their f-structure, but must be described in terms of informational distribution at i-structure level.<sup>1</sup> She demonstrates that the only universal feature of constituent interrogatives that holds cross-linguistically is the focusing of the interrogative phrase. If in all languages the core of constituent interrogatives is the requested new information, what varies cross-linguistically is how this new information is focused.

In sum, according to Mycock (2007), the universal features of constituent interrogatives are captured only in the i-structure of the sentence. The mapping of such informational distribution on the syntactic and/or prosodic structure is language specific. By including both syntactic and prosodic strategies, her principle accounts for typologically different languages.

### **3. Constituent questions in Italian**

Most grammatical analyses of Italian interrogatives (e.g., Lepschy & Lepschy 1981, Fava 1995, Serianni 1996, Dardano & Trifone 1997, Salvi & Vanelli 2004), indicate syntax as the key feature in the formation of constituent questions. This does not mean that prosody does not play any role in Italian: it means that the most important aspect of Italian constituent interrogatives is syntax. Leaving prosody for future investigation, this paper will deal only with the syntactic strategies that in Italian allow for the focusing of the new information enclosed in interrogative phrases.

Typologically Italian is a nonconfigurational language with a rich morphology. Although its canonical order is SVO, word order is relatively free, regulated by discourse and pragmatic choices (cf. § 3.2, ch. 2). In constituent questions, word order is marked: the interrogative phrase appears not in the position typical of its grammatical function, but initially in the sentence. This then, in interrogatives, is the position

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<sup>1</sup> For the theoretical development of incorporating within LFG the possibility of at least three other structures, besides a-structure, c-structure and f-structure, see Falk (2001: 22ff) and Choi (2001).

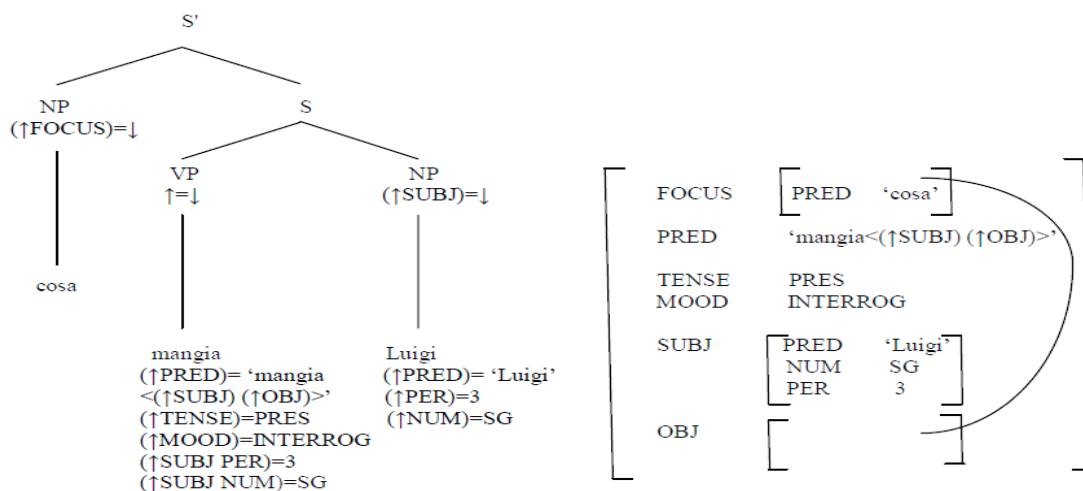
associated with the discourse function Focus. Because Italian is a language with syntactic focusing, FOC is grammaticalized and indicated at f-structure, where it bears also the grammatical function specified by the verbal predicate's argument list. Consider the Italian sentence in (4), whose syntactic rules are illustrated in (5), and the resulting c-structure and f-structure in (6).

- (4) cosa                      mangia                      Luigi?  
 what-FOC/OBJ      eat-3sgPRES      Luigi-SUBJ?  
 'what does Luigi eat?'

(5) PS-rules for Italian simple constituent questions

S'	→	$\overbrace{\hspace{2cm}}$ (XP) (↑FOCUS)=↓ ↑DF=↑GR	S
S	→	VP ↑=↓	NP (↑SUBJ)=↓
VP	→	V ↑=↓	NP (↑OBJ)=↓

(6) C-structure and f-structure of Cosa mangia Luigi?



As the figure in (6) shows, in Italian constituent questions, word order is marked in two ways. First, the interrogative phrase always appears clause-initially, that is, not in the position associated with its grammatical function. Secondly, also the subject is not in its canonical position. Albeit Italian is an SVO language, in pragmatically unmarked constituent questions the subject appears in post-verbal position – except, of course, when the QW itself bears the grammatical SUBJ function, as in (7).

- (7) chi                      viene                      domani?  
 who-FOC/SUBJ    comes-3sgPRES    tomorrow-OBL?  
 ‘who is coming tomorrow?’

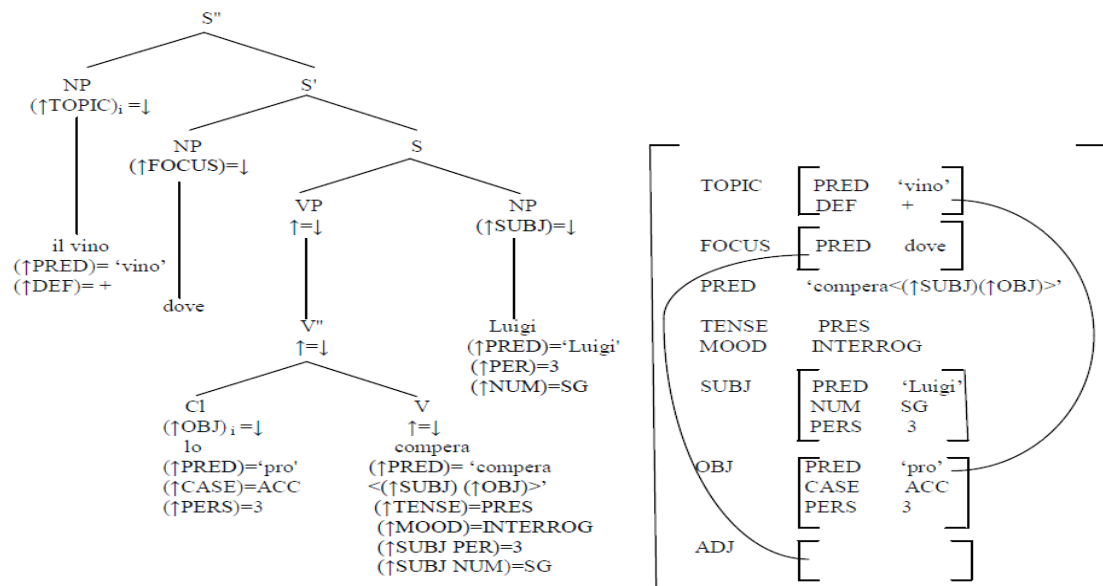
Furthermore, the order of Italian constituent questions can be marked in yet a third way if there is a topicalised constituent in first position. Consider the Italian sentence in (8), whose syntactic rules are illustrated in (9), and the resulting c-structure and f-structure in Figure (10). In this case, not only FOC (associated with a function other than SUBJ) and SUBJ appear in a non-canonical position, but also the OBJ. The complexity of this structure is further increased by the fact that in Italian the topicalization of the object requires the use of the clitic as the morphological marker of the object onto the verb (cf. §§ 1.5.2.1-2).

- (8) il vino                      dove                      lo                      compra                      Luigi?  
 the wine-TOP<sub>i</sub>    where-FOC/ADJ    it-OBJ<sub>i</sub>    buy-3sgPRES    Luigi-SUBJ?  
 ‘where does Luigi buy the wine?’

(9) PS-rules for Italian constituent questions with OBJ topicalization

S''	→	(XP) (↑TOPIC)=↓ ↑DF=↑GF	S'
S'	→	(XP) (↑FOCUS)=↓ ↑DF=↑GF	S
S	→	VP ↑=↓	NP (↑SUBJ)=↓
VP	→	V' ↑=↓	NP (↑OBJ)=↓
V'	→	(Cl) (↑OBJ)=↓	V ↑=↓

(10) C-structure and f-structure of *Il vino dove lo compera Luigi?*



#### 4. A developmental hypothesis

For explaining the development of Italian constituent questions by L2 learners, we hypothesize the PT-based hierarchy illustrated in (11). The examples in the Table are by native speakers, those in the text are taken from the learners' corpus described in § 5.



(11) Hypothesis of syntactic development of Italian constituent questions

Stage	Structure	Example
TOP + FOC + MARKED ALIGNMENT	TOP-OBJ <sub>i</sub> + QW + Cl <sub>i</sub> + V (+ SUBJ) ? including prodrop	<i>la pasta quando la fa Pia?</i> [pasta, when does Pia make it?] <i>la pasta quando la fa?</i> [pasta, when does she make it?]
FOC + MARKED ALIGNMENT	TOP-ADJ + QW + V + SUBJ ?	<i>per pranzo cosa mangia Paolo?</i> [for lunch what does Paolo eat?]
	QW + V + SUBJ ?	<i>quando arriva Paolo?</i> [when does Paolo arrive?]
FOC + UNMARKED ALIGNMENT	TOP + QW + SUBJ + V ? including prodrop	<i>*adesso perché tu hai la borsa?</i> [now why do you have the bag?] <i>adesso perché hai la borsa?</i> [now why do (you) have the bag?]
	QW + SUBJ + V ? including prodrop	<i>*cosa Pino ha comprato?</i> [what has Pino bought?] <i>cosa ha comprato?</i> [what has (he/she) bought?]
UNMARKED ALIGNMENT	SUBJ + V + QW ? including prodrop	<i>*Marta va dove?</i> [Marta goes where?] <i>*va dove?</i> [(he/she) goes where?]
SINGLE WORD/FORMULA	single words ? formulae ?	<i>thè, caffè?</i> [tea, coffe?] <i>come stai?</i> [how are you?]

Previous studies on Italian declarative sentences (e.g., Di Biase & Kawaguchi 2002; Di Biase & Bettoni 2007; Bettoni, Di Biase & Ferraris 2008; cf. also the table in (42), ch. 2) report that initially learners can produce only sentences with unmarked alignment between a-structure and c-structure, which results in the underspecified f-structure of canonical order (SVO). Therefore, with regard to constituent questions, we hypothesize that at this earliest stage the subject will be clause-initially in its default position, and the QW enclosing the FOC function will be in-situ occupying the position typically associated with its grammatical function. Because, as we have seen, Italian is a language focusing questions syntactically, this means that initially the interrogative phrase will not be focused (at least not syntactically), and that the informational distribution of the sentence will be typical of declaratives rather than of constituent questions. The outcome is an ungrammatical sentence, as the following one:

- (12) \*posso            scrivere        dove?  
       can-1sgPRES    write-INF      where-FOC/ADJ?  
       ‘where can I write?’

As shown for the development of Italian declarative sentences in § ? (cf. the table in (??) italiana, ch. 2), the next stage comes about when, according to the Topic Hypothesis, learners manage to place a constituent (XP) other than SUBJ in initial position, thereby separating the default association of TOP and SUBJ. For this reason, with regards to constituent questions, we hypothesize that now the interrogative phrase will be clause-initial and fronted; that is, it will appear at the beginning of the sentence and before the verb, in the position typical of the FOC discursive function. What follows this initial focal phrase, however, is still canonical word order (XP+SVO). Having yet to learn to assign a function to verbal arguments/constituents, learners do not master the means to disrupt it, as required in the target language. This means that the outcome can be grammatical if the interrogative phrase in initial position bears SUBJ function, as in (13), or if the sentence is prodrop, as in (14). On the other hand, when SUBJ is referentially or pronominally expressed in preverbal position without being questioned, the sentence is ungrammatical, as in (15)-(16).

- |      |   |                           |  |
|------|---|---------------------------|--|
| (13) | chi<br>who-FOC/SUBJ<br>'who has this bag?'                          | ha<br>have-3sgPRES        | questa borsa?<br>this bag-OBJ?                         |
| (14) | cosa<br>what-FOC/OBJ<br>'what does she study?'                      | studia?<br>study-3sgPRES? |  |
| (15) | *che sport<br>which sport-FOC/OBJ<br>'which sport does Alberto do?' | Alberto<br>Alberto-SUBJ   | fa?<br>do-3sgPRES?                                     |
| (16) | *dove<br>where-FOC/OBL<br>'where do you find these flowers?'        | tu<br>you-SUBJ            | trovi questi fiori?<br>find-2sgPRES these flowers-OBJ? |

At this same stage (FOC + unmarked alignment), in line with the Topic Hypothesis, we hypothesize that, as well as the fronted focal questioning element, also a topical element can be produced, followed by canonical word order. When the topicalised element bears the SUBJ function, the sentence is grammatical, as in (17), because the interrogative phrase is followed by prodrop. When TOP bears the ADJ function, that is, an ungovernable, non-core function, what follows is ungrammatical, as in (18), because SUBJ occupies preverbal position. Finally, when TOP bears the OBJ function (cf. the highest stage in (11) above), the sentence is ungrammatical not only because, if expressed, SUBJ is in preverbal position, but also because the missing OBJ clitic leaves the function of TOP unmarked, as in (19). Should, however, the required coreference with TOP be supplied by the repetition of the full noun rather than by the clitic, as in (20), then the sentence is grammatical. This is an easier solution for the learner, which is rare but not unknown among native speakers.

- |      |  |                        |                           |                               |
|------|--|------------------------|---------------------------|-------------------------------|
| (17) | Daniela<br>Daniela-SUBJ                | quando<br>when-FOC/ADJ | comincia<br>start-3sgPRES | a lavorare?<br>to work-XCOMP? |
|      | 'Daniela when does she start to work?' |                        |                           |                               |

- (18) \*adesso                    perché                    tu                    hai                    una borsa?  
 now-TOP/ADJ    why-FOC/ADJ    you-SUBJ    have-2sgPRES    a bag-OBJ?  
 ‘now why do you have a bag?’
- (19) \*la cartolina            dove                    hai                    comprato?  
 the postcard-OBJ    where-FOC/ADJ    have-2sgPRES    bought-m-sg?  
 ‘the postcard where have you bought it?’
- (20) la borsa                    per cosa                    usi                    la borsa?  
 the bag-TOP/OBJ    for what-FOC/OBL    use-2sgPRES    the bag-OBJ?  
 ‘the bag for what do you use the bag?’

Further along the developmental path, having learned to assign grammatical functions to constituents, learners can now mark them by means other than position, and thus disrupt canonical word. This means that they will codify native-like constituent questions also when the fronted focal phrase bears functions other than SUBJ, and place SUBJ in postverbal position, as in (21). Like at the previous stage (FOC+unmarked alignment), also at this stage (FOC+marked alignment), besides focalising the QW, learners may also topicalise constituents with a variety of grammatical functions. Because now noncanonical word order can follow, the sentence is grammatical if TOP is SUBJ as in (22), or TOP is ADJ as in (23), because learners can place SUBJ in postverbal position, and no further adjustments are required. The sentence in (24), however, is ungrammatical, because when TOP is OBJ the missing OBJ clitic leaves unspecified the function of the topic.

- (21) quando                    arriva                    Paolo?  
 when-FOC/ADJ    arrive-3sgPRES    Paolo-SUBJ?  
 ‘when does Paolo arrive?’
- (22) Maurizio                    cosa                    ha                    fatto                    Maurizio?  
 Maurizio-TOP/SUBJ    what-FOC/OBJ    have-3sgPRES    done-m-sg    Maurizio-SUBJ?  
 Maurizio what did Maurizio?
- (23) ieri                    cosa                    ha                    fatto                    Alberto?  
 yesterday-TOP/ADJ    what-FOC/OBJ    have-3sgPRES    done-m-sg    Alberto-SUBJ?  
 ‘yesterday what has Alberto done?’
- (24) \*La cartolina                    ti                    ha                    spedito                    tuo amico?  
 the postcard-TOP/OBJ    to you-OBJI    have-3sgPRES    sent-m-sg    your friend-SUBJ?  
 ‘has your friend sent you the postcard?’

Only at the final stage, parallel to the topicalisation of the object in declarative sentences (cf. Table 1.6), learners will be able to produce even constituent questions topicalising the object which are grammatical. In this type of sentence, not only the questioned constituent, but also both core functions of OBJ and SUBJ appear in a noncanonical position: the object is placed clause-initially, the questioned constituent is fronted, and the subject appears postverbally. As we have seen above, in order to signal the OBJ function of the topical NP, Italian requires the use of a coreferential clitic marker attached to the verb. Thus the sentence will be grammatical, as in (25) when learners manage, first, to identify the discourse and argument function of each NP, and secondly, to mark the object morphologically onto the verb. For all these reasons,

constituent questions with the topicalization of the object will be learned at quite an advanced stage.

- (25) *i compiti*                      *quando*                      *li*                      *fa*                      *Pino?*  
 homework-TOP<sub>i</sub>/OBJ      when-FOC/ADJ      them-OBJ<sub>i</sub>      do-3sgPRES      Pino-SUBJ?  
 ‘when does Pino do his homework?’

## 5. The study

In order to verify the developmental hierarchy hypothesized in § 4, we analyse cross-sectional data pertaining to seven learners with different levels of competence in Italian. The study also includes a native speaker (Gaetano) among our subjects. This inclusion is necessary for two reasons: first, because most of the structures tested are optional; should learners not produce them, the analyst cannot determine whether they are acquired or not, unless also native speakers fail to use them. Secondly, some of the structures are borderline cases between grammaticality and ungrammaticality; should also native speakers produce them in the same contexts, the analyst’s judgement will be more safely grounded. All learners are European students attending Italian courses at the Linguistic Centre of the University of Verona: three are Czech (Veronika, Peter and Eliska), two German (Cristine and Laurenz), one is English (Nick), and one Spanish (Maria) – names of course having been changed. All subjects were recorded in March and April 2008.

The data elicitation tasks for this study are partly inspired by those used for English questions (cf. e.g., Pienemann 1998: 280; Keatinge 2008), and partly specifically devised for Italian, which, unlike English, is a pro-drop language. Learners are prompted to produce interrogative sentences in order to gather information on two different objects or events (e.g., two mysterious objects, two types of weddings). Because the subject position is of great relevance in the grammatical codification of Italian constituent questions (cf. § 3), the presence of two items encourages the use of a full subject rather than the more common prodrop. In order to make sure that they do use it, learners are not allowed to collect information first on one item and then on the other, but have to make questions about them alternatively, thus specifying each time which item their questions are about. (For more details on these tasks, see Ferrari, Ginelli & Nuzzo’s Chapter 16.) In this study, five tasks were specifically targeted to elicit constituent questions, other tasks served as distractor.

This study concerns only affirmative constituent questions with lexical verbs whose a-structure maps canonically onto f-structure, such as *dare* (give) and *comprare* (buy). In other words, passives or so-called exceptional verbs (Pinker 1984), as well as negative sentences, will not be considered here. Altogether, we analyse 171 constituent questions encoded in full sentences, corresponding to an average of circa 24 for each of the seven learner, compared to 33 by Gaetano, Italian the native speaker.

## 6. The analysis

The empirical support for the interlanguage development hypothesised in (11) is presented cross-sectionally in (26), which illustrates analytically the distribution of the 171 constituent questions produced by our seven learners.

(26) *The development of Italian constituent questions – an analysis of the data*

Structure	Ve	Pe	Cr	La	El	Ni	Ma	Ga
TOPOBJ <sub>i</sub> + QWLOC + cl <sub>i</sub> -AUX + V-to <sub>i</sub> ?								1
*TOPOBJ <sub>i</sub> + QWSUBJ + cl <sub>i</sub> -AUX + V-to?							*1	
TOPSUBJ + QWOBJ + V + SUBJ ?				1		2		
TOPADJ + QWOBJ + V + SUBJ ?						1		2
QWOBJ + V + SUBJ ?	(8)	(12)	4	4	2	4		
QWOBL + V + SUBJ ?		(3)		1	1			3
QWLOC + V + SUBJ ?		(3)	2			1		2
QWQUANT + V + SUBJ ?			1		1			
QWADJ + V + SUBJ ?							2	4
*TOPADJ + QWADJ + SUBJpr + V ?			*1					
TOPOBJ + QWOBL + V + OBJ ?						1		
TOPOBJ + QWADJ + V + OBJ ?						1		
TOPOBJ + QWSUBJ + V + OBJ ?						1		
TOPSUBJ + QWOBJ + V ?			4	1	4			
TOPSUBJ + QWOBL + V ?				1				4
TOPSUBJ + QWLOC + V ?			1					1
TOPADJ + QWOBJ + V ?					1			1
TOPADJ + QWOBL + V ?								1
*QWOBJ + SUBJref + V ?	*1			*1				
*QWOBL + SUBJref + V ?	*1							
*QWOBL + SUBJpr + V ?	*1							
*QWQUANT + SUBJpr + V ?	*3							
*QWADJ + SUBJref + V ?	*1	*1	*2	*3				
*QWADJ + SUBJpr + V ?	*7	*5	*2					
QWQUANT + V ?					1			
QWOBL + V ?				2	3		1	1
QWLOC + V ?			1	1	2			2
QWSUBJ + V ?		2	2	3		1	3	1
QWOBJ + V ?		1	5	4	8	1	3	2
QWADJ + V ?	2		2	5	4	6	7	7
*V + QWLOC?					*1			
*V + QWADJ?				*1				1
*SUBJpr + V + QWOBJ?	*1							
Total	25	27	27	28	28	19	17	33

In our learner data, there are three in-situ constituent questions typical of the second, unmarked alignment stage, one of whose is shown in (27).

- (27) Veronica \*tu preferisci quale musica?  
 you-SUBJ prefer-2sgPRES which music-FOC/OBJ?  
 'which music do you prefer?'

This low number of occurrences may be attributed to the learners' L1s, since all their languages focalize the interrogative phrase by syntactic means: Spanish, English and German are simple-fronting languages, and Czech is multiple-fronting (cf. **Xxxxx data: xx-xx; Xxxxx data: xx-xx; Xxxxx data: xx-xx; Xxxxx data: xx-xx** respectively). This likeness with Italian is probably the reason why our learners overcome this first stage fast. On the other hand, the two in-situ constituent questions are not both produced by Veronika, the weakest learner, as one is used also by Eliska and one by Laurenz, whose linguistic competence is generally higher than Veronika's. As a matter of fact, albeit ungrammatical, this structure is produced once even by Gaetano, the native speaker, as shown in (28).

- (28) Gaetano \*l' ha colpita perchè?  
 her-OBJ have-3sgPRES impressed-f-sg why-FOC/ADJ?  
 'why has he impressed her?'

As we said in § 3, syntax is only the main feature in the codification of constituent questions in Italian, but by no means the only one. Although we do not deal with prosodic aspects here, it is safe to suppose that when the interrogative phrase appears in-situ, more advanced learners such as Eliska and Laurenz, like the native speakers, rely on prosody instead of syntax for its focalization.

The next stage up the developmental path concerns questions where the questioned phrase is clause-initial and fronted, that is, in the position typical of the FOC discourse function, followed by canonical order, including prodrop. As (26) shows, all seven learners have reached this stage. There are, however, significant differences among them in the distribution of the various structures belonging to this stage, especially concerning the use of SUBJ and prodrop. Namely, as learners progress, they seem to abandon the use of SUBJ and display a more frequent, native-like use of prodrop. Let us see how this come about.

Veronika, Peter, Cristine and Laurenz all use the ungrammatical preverbal SUBJ. It is interesting to note, however, that Veronica and Peter not only do it most often, but overuse the pronominal SUBJ in pragmatically unmotivated contexts. Particularly frequent is the use of the second person pronoun *tu*, as in (29), but not unknown is also the third person one, singular or plural, as in (30)-(31) respectively. Veronica even uses both pronominal and the referential SUBJ, as in (32).

- (29) Veronika \*quanto tempo tu passi con Marco?  
 how much time-FOC/ADJ you-SUBJ spend-2sgPRES with Marco-OBL?  
 'how much time do you spend with Marco?'
- (30) Peter \*perché lei paga questo cellulare?  
 why-FOC/ADJ she-SUBJ pay-3sgPRES this mobile-OBJ?  
 'why does she pay for this mobile?'
- (31) Peter \*quanto tempo fa loro sono incontrato?  
 how long ago-FOC/OBL they-SUBJ be-3plPRES met-m-sg?  
 'how long ago have they met?'

- (32) Veronika \*quale ora lei Daniela va dormire?  
 at what time-FOC/ADJ she Daniela-SUBJ andare-3sgPRES sleep-XCOMP?  
 at what time does Daniela go to sleep?

Compared to these two learners, who overuse the pronominal SUBJ and underuse prodrop, Cristine and Laurenz show some progress in two ways: first, their use of SUBJ, although still ungrammatically placed before the verb, is mostly referential rather than pronominal, and therefore pragmatically justified, as in (33); secondly, this implies that their figures for SUBJ decrease while those for prodrop increase, and become similar to Gaetano's, as (26) shows.

- (33) Cristine \*quando Daniela deve iniziare lavorare?  
 when-FOC/ADJ Daniela-SUBJ have-3sgPRES start work-XCOM?  
 'when does Daniela have to start working?'

On the other hand, in the cross-sectional data analysed here, there seems to be no evidence that some QWs are acquired later than others. In fact, as (26) shows, all learners can focalize constituents with a wide range of functions that is similar to Gaetano's, the native speaker – even Veronika and Peter as in (34)-(38), where QWs are respectively ADJ, SUBJ, OBJ, OBL, and OBJ-QUANT.

- (34) Peter \*dove tu trovi questi fiori?  
 where-FOC/OBL you-SUBJ find-2sgPRES these flowers-OBJ?  
 'where did you find these flowers?'
- (35) Peter chi paga questo cellulare?  
 who-FOC/SUBJ pay-3sgPRES this mobile-OBJ?  
 'who pays for this mobile?'
- (36) Veronika \*quale musica Marco preferisca?  
 what music-FOC/OBJ Marco-SUBJ prefer-3sgPRES?  
 'what music does Marco prefer?'
- (37) Veronika \*come Marco passa il tempo libero?  
 how-FOC/OBL Marco-SUBJ pass-3sgPRES free time-OBJ?  
 'how does Marco spends his free time?'
- (38) Veronica \*quanto tu pagi a questo libro?  
 how much-FOC/OBL you-SUBJ pay-2sgPRES this book-OBJ?  
 'how much did you pay for this book?'

Still within the FOC+unmarked alignment stage, the step of adding a topicalised constituent clause-initially before the fronted focal QW would seem relatively easy, and result in a grammatical sentence if the TOP nondiscourse function requires no identification on the verb. Yet it may not be a coincidence that Veronika and Peter do not attempt any topicalisation. On the other hand, most other learners do. Out of a total of 16 such sentences produced by all learners, 15 are grammatical because there is prodrop, as in (39), or the QW itself is SUBJ, as in (40). The remaining one, by Cristine shown in (41), is ungrammatical because its referential SUBJ is in pre-verbal position. Altogether, as we have seen is the case with the wide range of functions of question





always includes the same interrogative adjective (in his case an idiosyncratic *qualche*, instead of the targeted *quale*) followed by a noun; and on the other, the verb is constantly *preferire* (‘prefer’) inflected in the third person singular present indicative, albeit uncertainly as *preferà* and *preferiscia* in (45) and other form in utterances not shown here.

- (45) Peter
- a. qualche cibo                      preferi preferà                      Marco?  
 what food-FOC/OBJ    prefer-3sgPRES    Marco-SUBJ?  
 ‘which food does Marco prefer?’
- b. qualche musica                      preferiscia                      Marco?  
 what music-FOC/OBJ    prefer-3sgPRES    Marco-SUBJ?  
 ‘which music prefers Marco?’

The remaining 11 sentences with postverbal SUBJ by Peter, as exemplified in (46), begin with the formulas such as *che cosa fa* and *dove va* followed by SUBJ in the form of a proper noun, with or without an ADJ in the form of a PP.

- (46) Peter
- a. che cosa                      fa                      Daniela?  
 what-FOC/OBJ    do-3sgPRES    Daniela-SUBJ?  
 ‘what does Daniela do?’
- b. che cosa                      fa                      Roberto                      dopo dormire?  
 what-FOC/OBJ    do-3sgPRES    Roberto-SUBJ    after sleeping-XADJ?  
 ‘what does Roberto do after sleeping?’
- c. dove                      va                      Daniela                      dopo colazione?  
 where-FOC/OBJ    go-3sgPRES    Daniela-SUBJ    after breakfast-ADJ?  
 ‘where does Daniela go after breakfast?’
- d. dove                      va                      Roberto                      dopo colazione?  
 where-FOC/OBJ    go-3sgPRES    Roberto-SUBJ    after breakfast-ADJ?  
 ‘where does Roberto go after breakfast?’

Further evidence that the use of postverbal SUBJ is here formulaic is that, whenever Veronika and Peter vary their lexicon, word order is canonical, as we have seen in (29)-(32) and (34)-(38).

All other learners can place SUBJ postverbally with what appears to be native-like online processing, but in this regard Cristine and Laurenz seem less advanced than Eliska, Nick, and Maria. Looking at (26), we can see that the former two learners still alternate some postverbal SUBJ with others that are preverbal, marked as ungrammatical with an asterisk at stage 1 – respectively 7 vs 4 occurrences by Cristine, and 5 vs 3 by Laurenz. On the other hand, the latter three learners no longer produce ungrammatical preverbal SUBJ, and display convincing numbers of sentences where a variety of QWs are grammatically followed by noncanonical order, as in (47)-(49).

- (47) Eliska                      di che cosa                      parla                      la prima parte?  
 what-FOC/OBL    talk-3sgPRES    the first part-SUBJ?  
 ‘what is the first part about?’

- (48) Nick      dove                              è              uscita              Maria?  
 where-FOC/OBL be-3sgPRES gone-f-sg Maria-SUBJ?  
 ‘where did Maria go?’
- (49) Maria      quanti anni fa                              è              morto              il papà?  
 how many years ago-FOC/ADJ be-3sgPRES died-m-sg the father-SUBJ?  
 ‘how many years ago did her father die?’

Still within the FOC+marked alignment stage, Laurenz and Nick also produce questions where the fronted interrogative phrases are preceded by topicalized constituents bearing in three cases the SUBJ function, as in (50), and in one case the ADJ functions, as in (51). The topicalization of constituents bearing the SUBJ and ADJ functions does not imply any linguistic constraints in the grammatical codification of the sentence. Therefore, all four are grammatical.

- (50) Laurenz      Roberto che fa Roberto la sera?  
 Roberto-TOP/SUBJ what-FOC/OBJ do-3sgPRES Roberto-SUBJ evening-ADJ?  
 ‘Roberto what does Roberto do in the evening?’
- (51) Nick      per pranzo      cosa      ha      fatto      Maurizio      ieri?  
 for lunch-TOP/ADJ what-OBJ have-3sgPRES done-m-sg Maurizio-SUBJ yesterday-ADJ?  
 ‘for lunch what did Maurizio do yesterday?’

On the other hand, several constraints are operative when the topicalized constituent bears the OBJ function. In this case, as we have seen in § 3, not only do both the questioned constituent and the core functions appear in noncanonical positions, but TOP in initial position also requires to be marked functionally by verbal clitic. So, in order to codify the sentence correctly learners must be able, first, to identify the grammatical functions of all NPs, and secondly, to unify the number and gender features between the TOP and the clitic. Maria is the only learner that manages to produce this structure. However, her only example, shown in (52), by questioning the SUBJ avoids the issue of SUBJ postverbal position, but more to the point is still not fully native-like in one further way. Namely, whereas like Gaetano in (53) she correctly unifies features between TOP and clitic, unlike him she fails to do so between clitic and past participle when the verb is inflected analytically, as required in Italian (cf. § 3). Data confirm our hypothesis that the topicalization of the OBJ function is a difficult structure to acquire, fully learned in all its constraints only at the highest level. Not even Maria produces a target like sentence such as the one in (54):

- (52) Maria      i fiori                              chi              te              li              ha              dato?  
 flowers-TOP/OBJ<sub>i</sub>-m-pl who-FOC/SUBJ to you-OBJ<sub>i</sub> them-OBJ<sub>i</sub>-m-pl have-3sgPRES given-m-sg?  
 ‘the flowers who gave them to you?’
- (53) Gaetano      la cartolina                              dove              l’              hai              comprata?  
 the postcard-TOP/OBJ<sub>i</sub>-f-sg where-FOC/ADJ it-OBJ<sub>i</sub>-f-sg have-3sgPRES bought-f-sg?  
 ‘the postcard where did you buy it?’
- (54)              i fiori                              dove              li              ha              comprati      Piero?  
 flowers-TOP/OBJ<sub>i</sub>-m-pl where-FOC/ADJ them-OBJ<sub>i</sub>-m-pl have-3sgPRES bought-m-pl Piero-SUBJ?  
 ‘the flowers who gave them to you?’

## 7. Conclusion

In this exploratory cross-sectional study of the development of constituent questions in the Italian interlanguage of 7 learners, empirical data confirm the hypothesis presented in § 4. The numbers of occurrences for some of the structures is low, but this is not surprising, given their wide range, involving on the one hand several different functions associated with both QWs and topicalisations, and on the other both the presence or absence of the subject and its positions when present. Some combinations of these four factors – namely, function of QW, function of TOP, prodrop vs SUBJ, and SUBJ position – result in structures which, within PT’s framework, appear to be equally indicative of a learner’s progress. Our data support this, and show no evidence that the function of the QW matters, so much so that even the two learners who have reached only the lowest stage can focalize constituents with a range of functions similar to Gaetano’s, the native speaker. Thus in (55) we show a synthesis of our analytical presentation in (26).

(55) *The development of Italian constituent questions – an synthesis of the data*

Stage	Structure	Ve	Pe	Cr	La	El	Ni	Ma
XP (= TOPOBJ & FOC) + MARKED ALIGN.	TOPOBJ <sub>i</sub> + QW + cl <sub>i</sub> -V ?							(1)
XP (= FOC) + MARKED ALIGN.	(TOP +) QW + V + SUBJ ?	(8)	(18)	7	6	4	8	2
XP (= FOC) + UNMARKED ALIGNMENT	(TOP +) QW + SUBJ + V ?	*14	*6	*5	*4			(3)
	(TOP +) QW + V ?	2	3	15	17	23	8	14
UNMARKED ALIGNMENT	(SUBJ +) V + QW?	*1			*1	*1		

The number of ungrammatical in-situ sentences is very low, possibly because none of our learners is a complete beginner, and because all their L1s focalize QWs syntactically, allowing them to move fast beyond this very first stage. When beside Veronika also two other learners who seem otherwise more advanced produce in situ QWs, we may assume that, like the native speaker Gaetano, they mark their focus prosodically. This is possible because, as we have seen in § 3, syntax is by no means the only grammatical feature for focalizing them. Although ungrammatical, pragmatically speaking, the illocutionary force of these sentences remains unchanged provided prosody marks them as questions.

All 7 learners can focalize the QW syntactically by placing it before the verb as required in Italian. They show however different linguistic competence in the

grammatical codification of the sentence. After their QWs, Veronika and Peter produce consistently unmarked alignment, most often with an overuse of pronominal SUBJ, which is pragmatically unmotivated. On the other hand, their frequent use of formulas with postverbal SUBJ augurs well as a transition towards the next stage. Cristine and Laurenz have comfortably reached the marked alignment stage. Furthermore, their questions can be more elaborate with the addition of a topical element before the focal QW. However, with Cristine there is still a suspicion of overuse of pronominal SUBJ, and both learners still alternate between placing SUBJ grammatically after the verb and ungrammatically before. Nick and Eliska not only have reached the marked alignment stage, but neither any longer uses ungrammatical structure belonging to previous stages, nor overuses SUBJ. Furthermore, Nick uses also several topicalisations, including OBJ topicalisations, even though regarding the latter he shows no evidence of having reached the last stage, because he avoids ungrammaticality by marking the OBJ function of TOP lexically with the repetition of the full referent rather than morphologically with a coreferential clitic; the result may not be typically Italian, but augurs well for progressing to the next stages. Finally, Maria can topicalize also at the highest stage by marking the OBJ function of TOP morphologically with a clitic. Her sentence, however is not fully grammatical because she fails to unify features between the clitic and the past participle of her analytical verb.

We can conclude that the hypothesis of this cross-sectional study is supported. It would have been falsified if empirical data had contradicted the implicational relationship 'unmarked alignment > FOC + unmarked alignment > FOC + marked alignment > TOP & FOC + marked alignment'. But predictions did turn out positively, thus strengthening the case for PT's universal hierarchies (cf. 30 and 34, ch. 1) for the acquisition not only of declaratives but also of constituent questions in a nonconfigurational language like Italian marking them preponderantly by syntactic means.